

FEEDING HABITS OF THE WEEVIL *BARYPEITHES PELLUCIDUS* (COLEOPTERA: CURCULIONIDAE)¹

Jimmy R. Galford²

ABSTRACT: The weevil *Barypeithes pellucidus* was observed feeding on 18 species of plants in central Ohio. Feeding was light to very light on most species. Northern red oak, asters, American elm, hawthorn, and black cherry were preferred.

Adults of the introduced weevil *Barypeithes pellucidus* (Boheman) were reported feeding on northern red oak, *Quercus rubra* L., seedlings growing in the understory of a 20-year-old red oak plantation near Delaware, Ohio (Galford, 1986). The weevil population in this plantation was very low in 1985, but, in the spring of 1986, hundreds of adults were found easily.

The following life history observations were made: adults began emerging in mid-April, peaked in early May, and had disappeared by June 10th. The adults were mainly nocturnal but continued to feed on heavily shaded plants during early morning hours. Adults could be found feeding all day when the sky was heavily overcast. On sunny days, the adults aggregated in groups of 2 to 36 under piles of moist, dead oak leaves, logs, stones, moss, and fresh fallen tree leaves. The adults usually aggregated on one plant when feeding, and, in one instance, 42 weevils were found on a single wild rose, *Rosa* sp. Only once was feeding observed above 60 cm. The preferred feeding sites were leaves of small plants (2-30 cm. high) or the lower portions of larger plants in contact with the soil or duff, near piles of dead oak leaves. The adult weevils fed on leaves, small stems of new growth, or the epidermis of large green stems. On the common dandelion, *Taraxacum officinale*, the weevils fed lightly on the leaves but moderately on the epidermis of the flower stems. The epidermis of the midrib vein of dead, wet (saturated) red oak leaves was also consumed. Although feeding occurred on 18 plant species, feeding was light to very light on most and might have been termed "sampling." The following species are listed in order of observed feeding preference:

Scientific Name	Common Name	Degree of Feeding
<i>Quercus rubra</i>	Northern red oak	Heavy
<i>Aster divaricatus</i>	White wood aster	Heavy

¹Received January 23, 1987. Accepted April 25, 1987

²Northeastern Forest Experiment Station, Forestry Sciences Laboratory, 359 Main Road, Delaware., Ohio 43015

Scientific Name	Common Name	Degree of Feeding
<i>Aster lowrieanus</i>	Lowrie's aster	Heavy
<i>Ulmus americana</i>	American elm	Heavy
<i>Crataegus</i> sp.	Hawthorn	Moderate
<i>Prunus serotina</i>	Black cherry	Moderate
<i>Taraxacum officinale</i>	Common dandelion	Light
<i>Potentilla</i> sp.	Cinquefoil	Light
<i>Senecio</i> sp.	Ragwort	Light
<i>Cirsium arvense</i>	Canada thistle	Light
<i>Rhus radicans</i>	Poison-ivy	Light
<i>Rosa</i> sp.	Wild rose	Light
<i>Lysimachia nummularia</i>	Moneywort	Very Light
<i>Pastinaca sativa</i>	Wild parsnip	Very Light
<i>Scutellaria</i> sp.	Mint	Very Light
<i>Vitis</i> sp.	Wild grape	Very Light
<i>Barbarea verna</i>	Early winter cress	Very Light
<i>Dipsacus laciniatus</i>	Teasel	Very Light

About half of nearly 200 2-year-old red oak seedlings under observation in the oak plantation understory were defoliated partially to wholly by the weevils before a violent storm littered the ground with leaves. The weevils then fed on the fallen leaves, and damage to the red oak seedlings nearly ceased. After several days of overcast, rainy weather, the weevils died by the hundreds from a fungus disease. This same disease made laboratory studies on the weevils very difficult because most of the weevils died in 3 to 4 days.

Weevils that were kept in 150- x 20-mm petri plates and provided fresh red oak leaves laid eggs sparingly in moist soil. The oblong, dark yellowish-brown eggs began to hatch in ca. 12 days at 22-26°C.

Larvae of *B. pellucidus* may be root feeders. A few larvae have been reared into second and third instars on small fibrous red oak roots in 30-ml plastic cups. Soil excavations made in late April near a sprouting red oak stump revealed several teneral adults at depths of 5 to ca. 15 cm; however, several other species of plants were growing around the stump. The larval host or hosts of *B. pellucidus* need to be determined.

LITERATURE CITED

- Galford, J.R. 1986. Weevil *Barypeithes pellucidus* (Coleoptera: Curculionidae) feeds on northern red oak, *Quercus rubra*, seedlings. Entomol. News 97: 113-114.